

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (Currently amended): A method for distributed data mining, comprising the steps of:

invoking agents by a mediator;

beginning attribute selection by a plurality of agents;

passing a best attribute from each of said plurality of agents to said mediator

wherein a best attribute is an attribute having a highest information gain as between attributes found by the respective agent;

selecting a winning agent from said plurality of agents by said mediator;

~~notifying each of said plurality of agents of said winning agent;~~

initiating data splitting by said winning agent;

forwarding split data index information resulting from said data splitting by said winning agent to said mediator;

forwarding said split data index information from said mediator to each of said plurality of agents;

initiating data splitting by each of said plurality of agents other than said winning agent;

generating and saving partial rules; and

outputting complete rules to said plurality of agents.

Claim 2 (Original): A method as claimed in claim 1, wherein said plurality of agents include non-winning agents, and further comprising the step of:

obtaining split data index information by said non-winning agents from said mediator.

Claim 3 (Original): A method as claimed in claim 1, wherein said split data index information is compressed.

Claim 4 (Currently amended): A method for distributed data mining, comprising the steps of:

invoking a plurality of agents at a corresponding plurality of distributed data locations, each of said agents identifying local attributes that split the data of corresponding local data location into classes;

each of said agents determining a local attribute having a highest information gain for the respective local data locations;

forwarding the local attribute having the highest information gain for each of the agents local data locations to a mediator;

selecting an as attribute having a highest information gain from among the local attributes received by the mediator, said selected attribute being considered a winning global attribute;

distributing the winning global attribute to said plurality of agents for application to the data of the local data locations to split the local data;

invoking said plurality of agents to identify further local attributes of the split data at the local data locations;

at each local data location determining the further local attributes having a highest information gain for the split data;

forwarding the further local attributes having a highest information gain for each local data location to the mediator;

selecting an attribute having a highest information gain from among the further local attributes received by the mediator to provide a further winning global attribute; and

distributing the further winning global attribute to each of the distributed data locations for application to provide further split data at the local data locations.